

# GUIDE TO OPERATIONS

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## Operations Website

SC Wing Operations has several pages on the wing website. The address is:  
[www.scwg.cap.gov](http://www.scwg.cap.gov).

Many resources are available on the website. Please review it thoroughly. Pilots should access the WMU through the wing home page (Wing Management Utilities) and enter their pilot information. Log in under the 'member' button to accomplish this. Wing staff will validate the web information when copies are sent to Wing HQ.

## CAP Aircraft

Civil Air Patrol aircraft are assigned to squadrons to fulfill the primary missions of CAP. These missions are Emergency Services, Cadet Programs and Aerospace Education. Use of CAP aircraft is determined by mission priority: A missions supercede B missions and B missions supercede C missions. We're under a mandate from CAP and the Air Force to fulfill their missions. These missions are 'A' and 'B' flying.

All Wing aircraft are required to attend all Wing training events. These include flight clinics, mission training, SAR/DR exercises and the National Check Pilot Clinic. For Region events, the units should be aware of the training schedule and be prepared for their aircraft to be tasked for these events. Region events include MERSAR, National Flight Academies and the Mountain Flying Clinics. Preparations include keeping an eye on the time for upcoming 50 hour and 100 hour inspections as well as IFR certifications and ELT battery changes.

The aircraft assigned to your squadron belongs to Civil Air Patrol. Although there should be 'pride of ownership' with reference to the care for the aircraft, be aware that it is a CAP aircraft, not XYZ squadron's aircraft. If it's needed for a CAP use away from your ramp, it will be tasked.

If the aircraft isn't kept clean, isn't maintained in timely fashion, isn't flown to further the missions of CAP and the reporting isn't done on time, the aircraft will be assigned to another unit who will achieve these goals.

N142CP	Maule	CPF 3922
N2263T –	C182RG	CPF 3920
N5320K –	C172	CPF 3929
N738HD –	C172	CPF 3927
N738NH –	C172	CPF 3928
N759MY –	C182	CPF 3921
N80394 –	C172	CPF 3923
N926CP –	C172	CPF 3926
N9906L –	C172	CPF 3925
N99162 –	C172	CPF 3924
N993CP –	C172	CPF 3930

## Maintenance

It's the responsibility of unit to ensure maintenance is performed promptly. No excuse. The Wing Maintenance Officer, Major Cordy Williamson should be informed immediately if there's a maintenance need. If the reason for maintenance is the direct result of poor pilot technique, the pilot can expect to pay for the maintenance. This includes replacing batteries because the master switch was left on and tire replacement due to bad landings.

Some items may be deferred until 100 hour inspection if they aren't critical to the operation of the aircraft. An inoperative DG/attitude indicator/fuel leaks/inoperative radios/inoperative DF radio/wheel bearings/etc. must have repair priority. DO NOT leave an A/C requiring maintenance grounded on the ramp to be fixed later. If the A/C cannot be flown IFR or for a mission, repair takes priority. If you can't get the A/C repaired in a timely manner, another squadron would be happy to do so for you.

### A/C washing

Aircraft should be washed and vacuumed on a monthly basis. Special attention to the belly of the aircraft should be given – oil often accumulates on the belly and antennas. Oil accumulation on antennas can cause problems with proper functioning of avionics. Part of the Air Force inspection is checking the cleanliness of the aircraft.

### A/C condition

All parts of the aircraft should be present and functioning. If cowlings screws are missing, replace them immediately. If the checklist is lost or incomplete, replace it. If the POH is AWOL, replace it immediately. If the landing light is out, change it. Strive for perfection in care for the aircraft.

### Oil

Keep 2 quarts of oil in the A/C at all times. Please make sure that all pilots know that we use Aeroshell W100+. Before you transfer the aircraft to your sharing squadron, ensure that the 2 quarts of oil are in the A/C. We purchase oil in quantity at a significantly reduced cost and we will not provide reimbursement for oil purchased at retail prices.

The wing will provide the oil and filters for oil changes. The squadron is responsible for the cost and/or labor for the oil change. Units are encouraged to change their own oil and to perform other preventative maintenance per the FAR's.

Adding oil – most of our C172's require the oil level to be kept between 6 and 8 quarts. Please be advised that 8 quarts is too much. If you add a quart of oil when the level is at 7 quarts, most of that quart will probably be thrown out. Add oil when the level gets down to 6 1/4 quarts or less, but no lower than 6 quarts. This same advice applies to the minimum and maximum quantities for the C182 and C182RG.

### Maintenance Purchase orders

Purchase order numbers for maintenance can be obtained from Cordy Williamson. If Cordy has escaped the state to winter in Hot Springs, Arkansas or the beautiful mountains of North Carolina during snow and ice season, or he is enjoying the Gulf Coast or Atlantic Coastal areas during hurricane season, PO numbers can be obtained from Cindy Aulbach.

If the aircraft must be ferried for maintenance, an authorization number will be issued to accompany the B8 mission symbol. This authorization number must be listed on the CAPF 99's (wing and FRO), and wing will pay the expenses for the flight. If there is no mission number or if it is NOT used, the unit or member will pay for the flight.

# Pilots

## Pilot Paperwork

As the operations officer, you're in a position of responsibility to see that your unit has pilots qualified to fulfill CAP missions. One important job is to ensure that your unit commander has sent the necessary requests to the Wing Commander for approval. These requests must be renewed each January 1<sup>st</sup> and then as needed when pilots are added. Letters must be sent to appoint Check Pilots, Mission Check Pilots, Instructor Pilots and CAP and ROTC Cadet Orientation Pilots. Of course, letters requesting these appointments must be backed up by records proving the individual's qualifications for the appointment. No one may serve or act in these capacities without appointment/approval in writing by the Wing Commander.

In order to be a CAP pilot, pilot records must be sent to Wing Headquarters. The Director of Operations is responsible for maintaining pilot records and the pilot roster. Pilots have a one month grace period after a form 5 checkride to get their records to Wing HQ. It is the operations officer's responsibility to review the pilot roster each month to ensure that all the unit's pilots are reported correctly. Also, ensure that your pilots have submitted the paperwork for their CAP aeronautical rating in order to wear CAP wings.

In addition to the requirement to send pilot records to wing HQ, the operations officer is responsible for ensuring that the information is put into the WMU (FMS in the future). Pilots can enter their own information. The Operations Officer should ensure that this is done in a timely manner. The new pilot roster is now generated from the WMU. Provide guidance to members who have difficulty using the WMU.

## Pilot Guidance

Pilots should be encouraged to fly for proficiency. It's an unwritten responsibility of the operations officer to monitor pilot flying. If you have a pilot who hasn't flown in a while, particularly a low-time pilot, encourage the pilot to get with an instructor pilot and get current and proficient.

However, along the lines of proficiency, CAP is not a flying club. People who join CAP for "cheap" flying should be told that they must participate in squadron and emergency services areas in order to have the privilege of flying a CAP aircraft. Units with a large amount of C proficiency flying and little A or B flying should evaluate what their needs really are for an aircraft.

Another area CAP pilots have shown some weakness is in the use of the checklist. One of the most blatant areas of nonuse is with the after-landing and shutdown checklists. There are usually some obvious signs that a pilot hasn't used the checklist and/or isn't familiar with the POH. Have your pilots report discrepancies when you see them. You can charge the offending pilot \$20/hour for the maintenance fee and the squadron can use it as a fundraiser. Do whatever will work. Overlooked items often include the transponder left on ALT or turned to OFF. It should be turned to STBY. The control lock left in the seat pocket is another sign. Although some checklists don't have this item, the fuel selector valve should be turned to either the left or right tank, depending on your political persuasion. Lights left on are also a dead giveaway that the checklist stayed in the pocket during shutdown (and probably all other phases of flight). One exception to the electrical switches is the Beacon Light. In warm weather especially, I encourage everyone to leave the beacon on. If the master switch is overlooked, someone is bound to notice

the beacon light flashing – hopefully before the battery is drained. After a nighttime shutdown in which the master switch was left on, there's one CAP pilot that I know who will always now leave the beacon on. All it took was the purchase of one battery!

Pilots should be familiar with the equipment in the aircraft. Most aircraft have the same Nav/Comm radios and GPS's. However, the new planes have different equipment. It's your responsibility to be familiar with the use of the equipment in the aircraft assigned to you. We've had some expensive maintenance flights in the past to discover that the problem was simply a switch error due to a lack of knowledge of the system. Squadron training events can include sessions on the proper use of the audio panel as well as GPS training. On numerous occasions, I've gotten into CAP aircraft to see the audio panel set in a manner that made it obvious that the previous pilot was totally clueless about the use of the audio panel.

Pilot proficiency flights should include practicing proper techniques on landing and taxiing. Most of our aircraft taxi very well using the rudder pedals for steering. If a proper taxi speed is maintained, brakes should NOT be needed for routine steering. Obviously, use brakes as needed, especially to avoid a taxi incident/accident, but the overuse of brakes while taxiing shows a lack of proficiency and professionalism. Use proficiency time to practice precision taxiing – you'll be surprised at what you can do.

Another area for proficiency is landing practice. Flat spots on tires are unacceptable. There's absolutely no excuse for flat spots except a lack of proficiency and poor technique. Keep your feet away from the brakes on landing. Believe it or not, there are some pilots who are totally clueless about this. Clue them in – NOW. Encourage your pilots to carefully preflight the tires. If there's a flatspot, it behooves them to report it before they fly. That way we can pinpoint the pilots who are responsible for flat spots and they can receive some remedial training so they won't do it again.

The nosewheel is another area in which I've noticed CAP pilots need some work. My saying is: 'Be kind to your nosewheel and it'll never let you down.' Proper landing technique includes landing on the main wheels and keeping the nosewheel off the runway until it comes down on its own. Too many people haven't been taught the proper way to land an aircraft and they either make flat landings or they let the nosewheel drop immediately after touching down on the mains. Be creative in coming up with ways to teach people this essential technique.

Another area involving the nosewheel has to do with taxiing. Never taxi with your hands off the yoke. Unless you have strong winds to contend with, hold back pressure on the yoke and keep the weight off the nosewheel while taxiing. Of course, the use of proper aileron inputs with crosswinds goes without saying.

Most of you have used rental planes that have a bad nosewheel shimmy. This is due to poor technique on the part of the pilots renting the plane. Don't tolerate this in your unit. Fly with your pilots and help guide them in proper technique and style. This will reduce our maintenance costs and will help us to show that although we're volunteers, we're indeed professionals.

This same attitude should be taken with radio procedures as well as flight service briefings. First of all, the use of the Capflight callsign makes us stand out. However, when we hear a CAP pilot using improper procedures at an uncontrolled field or sounding like they're never talked to ATC in their life, it makes it hard for the rest of us to be proud of CAP. If you hear any of this, please deal with the pilot if he's in your unit, or let us know and we'll deal with it. ATC facilities have called us in the past when there's been a problem with a CAP pilot – let's try not to let that happen again!

The Capflight call sign is an FAA assigned call sign. As such, we're supposed to use group numbers when using our call sign, just like the airlines. For example, CPF 3920 should be said "Capflight thirty-nine twenty," NOT "Capflight three niner two zero." Reference the AIM on this if you need to. To have credibility we have to start out by sounding like we know what we're doing. However, for the CAP radio, group numbers shouldn't be used. The good news is that the Director of Communications has told me that if we accidentally use group numbers he won't rescind our ROA cards.

For filing flight plans, the abbreviation is 'CPF' so you need to file as Charlie Papa Foxtrot thirty-nine xxx.

Our aircraft are not meant to be used for remedial training for non-current pilots. If you have a pilot join your squadron and he indicates that he hasn't flown for 2 months or a year or whatever, it is within your right to guide him to the nearest FBO for remedial training.

## **Cadet Orientation Flights**

The CAP Cadet Orientation Flight program was revised last fall. Please use the CAP/ROTC Orientation Powerpoint presentation on the Operations website to become familiar with the program. Pilots must be checked out as Cadet Orientation pilots – the initial checkout is not simply checking the square on the Form 5. The pilot must know and understand all the applicable regulations and procedures for flying cadets.

These are B15 flights that must be flown IAW CAPR 52-7 and reported on CAPF 7's and 108's. Please ensure that the proper paperwork is filled out to ensure reimbursement.

## **ROTC Flights**

Orientations to the ROTC program are mandatory. This orientation includes flight procedures as well as reporting procedures. All paperwork must be sent to the ROTC coordinator, Major Joe Gleason, the same day in which the flights were flown. This paperwork includes the special ROTC 108 (both sides) and the ROTC flight documentation.

Requirements: Pilots must have over 300 hours PIC time to fly ROTC cadets. They must also read and be thoroughly familiar with the information packet we have on ROTC orientation flights.

Paperwork – It goes without saying that the paperwork must be done properly. But – it's not being done right by everyone. The front-seat cadet AND the back-seat cadet must be listed on the ROTC form. Also, the cadet names must be listed on the Aircraft Flight log.

Ferry time – the 108's must reflect the number of hours of ferry time as well as the number of hours of sorties. Ferry time MUST NOT be abused. The Air Force is paying to ferry the A/C back to its home base. It's not to be used to move pilots and planes around for maintenance or transferring aircraft. Misuse of ferry time will be cause for suspension due to an improper flight release.

## **Aircraft Paperwork**

### Reporting Responsibility

This responsibility should be worked out between the sharing squadrons. As soon as possible, the sharing units should inform the Wing as to which squadron will have primary responsibility for reporting and oversight. The Wing **MUST** be informed anytime an aircraft is transferred to another unit.

### SC Wing Form 21

This is the monthly reporting form for the aircraft. This report, with the 99's, is due by the 5<sup>th</sup> of the month or by Commanders Call, whichever is later. A fax is acceptable for the preliminary submission. However, all originals and fees are due by the 10<sup>th</sup> of the month.

This form has been changed dramatically. National HQ now requires much more information each month. National's needs are reflected on this new form. **ALL** blanks **MUST** be filled in. It's the responsibility of the operations officer, and by extension, the squadron commander, to be informed of the status of the aircraft. If you don't know when the ELT battery expires, check the A/C logbooks and find out. If you don't have the time or the knowledge to find out the pertinent information, you probably don't have time or the knowledge to have responsibility for an aircraft on your ramp.

One difficult part of the Form 21 is getting the number of hours flown to match up with the numbers derived by mission symbols. CAP pilots tend to have problems with higher math, particularly subtraction. The Form 99's must be thoroughly looked at to figure out where the discrepancies are. This isn't always an easy task. This is, however, the job of the operations officer, not the Director of Operations. The form available on the Operations Website was designed by Lt. Dave Meyer, Greenville Squadron Operations Officer. It's an Excel spreadsheet that helps you to accurately report flight time and find the discrepancies in the 99's.

### Payment of maintenance fees

It's the responsibility of the current/primary squadron to pay for all flying for the reporting month. **ANY** and all maintenance fees due for the month must be paid by the reporting/primary squadron. It's the responsibility of the reporting squadron to pay these fees by the 10<sup>th</sup> of the month. The squadron will collect the fees from the flying pilots. For example, if a Lexington pilot flies the A/C assigned to the Columbia squadron, Columbia must pay the maintenance fee to the wing by the 10<sup>th</sup> of the next month. It's Columbia's responsibility/problem to collect the money from the Lexington pilot. Maintenance fees shall **NOT** be withheld from Wing because the squadron hasn't received the payment from the pilot.

### SC Wing Form 99

The SC Wing Form 99 is the Aircraft Flight Log. I've had several occasions where I've gone to fly an aircraft and there were no forms to be found in the plane. The operations officer is responsible for ensuring that multiple copies of all necessary forms are available.

As mentioned above, one problem with the Form 99 is subtraction errors. Another is transcription errors. Please emphasize to the pilots the importance of accuracy. Once you've spent several hours trying to track down a 0.1 hour discrepancy, you'll be ready to teach a two hour class to your pilots on basic math and writing skills.

Also, with reference to discrepancies, all time put on the hobbs meter must be reported. A 0.2 hour runup after an oil change must be logged as a B8. We have to account for every tenth of an

hour to National.

When the aircraft is transferred from one squadron to another, there is often a discrepancy between the ending hobbs and tach times and the beginning times reported by the next squadron. Again, we have to account for ALL time. The missing time will be charged to the squadron relinquishing the aircraft.

Another area where discrepancies occur is when the hobbs meter is very close to turning over to the next tenth. So the first pilot dutifully records 538.3, whereas the next pilot sees 538.4 on the hobbs meter. Well, the second pilot has no desire to pay for the first pilot's time so an error is introduced on the books. These discrepancies should be dealt with at the unit level so the time reported and the amount paid for maintenance are accurate.

All entry blanks on the Form 99 MUST be filled in with only one exception. That exception is the mission number for some B missions and all C missions. Also, the purpose of the flight needs to be more clearly stated. It's not sufficient to write the mission symbol in this part. Ensure that the pilots know to print the name of the flight release officer and SIGN their name. The signature is very important. The names of ALL passengers should be entered on the Form 99. It's not sufficient to put the name of the pilot and then simply write "cadets." We need to know which cadets were on the flight.

#### CAP Form 99 – Flight Release Logs

Flight release logs must be submitted to Wing HQ by the 5<sup>th</sup> of the month. If no releases were given by an FRO that month, a Form 99 must be submitted stating that fact. As the Operations Officer, you should remind all FRO's that these logs are required each month.

#### Aircraft Flight Operations Book and Logbooks

When the aircraft is returned to service after maintenance, it's your responsibility to check the logbooks to ensure that the proper entries were made. We had one instance where an aircraft had the airframe in annual inspection but the engine WAS NOT, due to an erroneous entry that NO ONE caught for over one year. All logbooks need to be checked. For all 100 hour inspections, please make sure that the A/C was signed off for an annual – most of our maintenance shops know to do that.

You're also responsible for ensuring that the VOR receiver check is done monthly and that any upcoming maintenance needs are reported to the Wing in a timely manner. We've had several occasions where a sharing squadron has arrived to pick up an aircraft only to find out that it was one hour out from a 100 hour inspection, or worse yet, completely out of IFR certification. If the transponder is past its 24-month inspection, a ferry permit is required to fly that aircraft.

Ensure that the Flight Operations Book has all the necessary paperwork. Forms for the aircraft inspections, discrepancies and VOR receiver checks are attached, as are the SC Wing Form 99's.

When discrepancies are written up (and reported), please deal with them promptly. When a squawk has been repaired, or dealt with, please sign the discrepancy sheet and clear the squawk.